

*P. 6/10/02*

fifteen to twenty years several methods for producing transgenic plants have been developed, and the present invention, in particular embodiments, also relates to transgenic versions of the claimed hybrid maize line X1179J.

### In the Claims

Please amend the following claims:

#### 6. (Amended)

The tissue culture according to claim 5, the cells or protoplasts being from a tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.

#### 8. (Amended)

The maize plant of claim 2 wherein said plant has been manipulated to be male sterile.

#### 10. (Amended)

The method of claim 9 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

#### 11. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 2, wherein said maize plant has derived at least 50% of its ancestral alleles from X1179J and is capable of expressing a combination of at least two X1179J traits selected from the group consisting of: high harvestable yield for its maturity, excellent resistance to Anthracnose Stalk Rot, above average late season stalk lodging resistance, above average tolerance to Corn Lethal Necrosis, above average tolerance to Southern Leaf Blight, above average resistance to Fusarium Ear Mold, favorable to North Carolina, South Carolina, Georgia, Florida, Alabama, Missouri, Tennessee, Kentucky, Arkansas, Texas, Oklahoma, New Mexico, Arizona, Nebraska, Kansas, Colorado, and California, and a relative maturity of approximately 117 based on the Comparative Relative Maturity Rating System for harvest moisture of grain wherein a sample of a maize variety X1179J was deposited under ATCC Accession Number

wherein a sample of a maize variety X1179J was deposited under ATCC Accession Number \_\_\_\_\_

14. (Amended)

The method of claim 13 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

15. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 12, wherein said maize plant has derived at least 50% of its ancestral alleles from X1179J and is capable of expressing a combination of at least two X1179J traits selected from the group consisting of: high harvestable yield for its maturity, excellent resistance to ~~Anthracnose~~ Stalk Rot, above average late season stalk lodging resistance, above average tolerance to Corn Lethal Necrosis, above average tolerance to Southern Leaf Blight, above average resistance to Fusarium Ear Mold, favorable to North Carolina, South Carolina, Georgia, Florida, Alabama, Missouri, Tennessee, Kentucky, Arkansas, Texas, Oklahoma, New Mexico, Arizona, Nebraska, Kansas, Colorado, and California, and a relative maturity of approximately 117 based on the Comparative Relative Maturity Rating System for harvest moisture of grain wherein a sample of a maize variety X1179J was deposited under ATCC Accession Number \_\_\_\_\_.

18. (Amended)

The method of claim 17 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

19. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 16, wherein said maize plant has derived at least 50% of its ancestral alleles from X1179J and is capable of expressing a combination of at least two X1179J traits selected from the group consisting of: high harvestable yield for its maturity, excellent resistance to Anthracnose Stalk Rot, above average late season stalk lodging resistance, above average tolerance to Corn Lethal Necrosis, above average tolerance to Southern Leaf Blight, above average resistance to Fusarium Ear Mold, favorable to North Carolina, South Carolina, Georgia, Florida, Alabama, Missouri, Tennessee, Kentucky, Arkansas, Texas, Oklahoma, New Mexico, Arizona, Nebraska, Kansas, Colorado, and California, and a relative maturity of approximately 117 based on the Comparative Relative Maturity Rating System for harvest moisture of grain wherein a sample of a maize variety X1179J was deposited under ATCC Accession Number \_\_\_\_\_.

21. (Amended)

The maize plant of claim 20 wherein said maize plant has been manipulated to be male sterile.

23. (Amended)

The method of claim 22 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhance selection, and transformation.

24. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 20, wherein said maize plant has derived at least 50% of its ancestral alleles from X1179J and is capable of expressing a combination of at least two X1179J traits selected from the group consisting of: high harvestable yield for its maturity, excellent resistance to Anthracnose Stalk Rot, above average late season stalk lodging resistance, above average tolerance to Corn Lethal Necrosis, above average tolerance to

Southern Leaf Blight, above average resistance to Fusarium Ear Mold, favorable to North Carolina, South Carolina, Georgia, Florida, Alabama, Missouri, Tennessee, Kentucky, Arkansas, Texas, Oklahoma, New Mexico, Arizona, Nebraska, Kansas, Colorado, and California, and a relative maturity of approximately 117 based on the Comparative Relative Maturity Rating System for harvest moisture of grain wherein a sample of a maize variety X1179J was deposited under ATCC Accession Number \_\_\_\_\_.

27. (Amended)

The method of claim 26 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

28. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 25, wherein said maize plant has derived at least 50% of its ancestral alleles from X1179J and is capable of expressing a combination of at least two X1179J traits selected from the group consisting of: high harvestable yield for its maturity, excellent resistance to Anthracnose Stalk Rot, above average late season stalk lodging resistance, above average tolerance to Corn Lethal Necrosis, above average tolerance to Southern Leaf Blight, above average resistance to Fusarium Ear Mold, favorable to North Carolina, South Carolina, Georgia, Florida, Alabama, Missouri, Tennessee, Kentucky, Arkansas, Texas, Oklahoma, New Mexico, Arizona, Nebraska, Kansas, Colorado, and California, and a relative maturity of approximately 117 based on the Comparative Relative Maturity Rating System for harvest moisture of grain wherein a sample of a maize variety X1179J was deposited under ATCC Accession Number \_\_\_\_\_.

31. (Amended)

The method of claim 30 wherein the plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment

length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

32. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 29, wherein said maize plant has derived at least 50% of its ancestral alleles from X1179J and is capable of expressing a combination of at least two X1179J traits selected from the group consisting of: high harvestable yield for its maturity, excellent resistance to Anthracnose Stalk Rot, above average late season stalk lodging resistance, above average late season stalk lodging resistance, above average tolerance to Corn Lethal Necrosis, above average tolerance to Southern Leaf Blight, above average resistance to Fusarium Ear Mold, favorable to North Carolina, South Carolina, Georgia, Florida, Alabama, Missouri, Tennessee, Kentucky, Arkansas, Texas, Oklahoma, New Mexico, Arizona, Nebraska, Kansas, Colorado, and California, and a relative maturity of approximately 117 based on the Comparative Relative Maturity Rating System for harvest moisture of grain wherein a sample of a maize variety X1179J was deposited under ATCC Accession Number \_\_\_\_\_.

Please add new claims 33 – 41 as follows:

33. (New)

A method of making a hybrid maize plant designated X1179J comprising: crossing an inbred maize plant GE534640, deposited as \_\_\_\_\_ with a second inbred maize plant GE567914, deposited as \_\_\_\_\_; and developing from the cross a hybrid maize plant representative seed of which having been deposited under ATCC Accession Number \_\_\_\_\_.

• • • 34. (New)

A method of making an inbred plant comprising: obtaining a hybrid maize plant of claim 2 and

applying double haploid methods to obtain a plant that is homozygous at essentially every locus, applying double haploid methods to obtain a plant that is homozygous at essentially every locus, said plant having received all of its alleles from maize hybrid plant X1179J.

35. (New)

A method for producing an X1179J progeny maize plant comprising:

- (a) growing the plant of claim 2, and obtaining self or sib pollinated seed therefrom; and
- (b) producing successive filial generations to obtain an X1179J progeny maize plant.

36. (New)

A maize plant produced by the method of claim 35, said maize plant having received all of its alleles from hybrid maize plant X1179J.

37. (New)

The maize plant of claim 36 wherein said maize plant comprises 2 or more X1179J characteristics described in Table 1 or 2.

38. (New)

A method for producing a population of X1179J progeny maize plants comprising:

- (a) obtaining a first generation progeny maize seed produced by crossing the maize plant of claim 2 with a second maize plant;
- (b) growing said first generation progeny maize seed to produce F<sub>1</sub> generation maize plants and obtaining self-pollinated seed from said F<sub>1</sub> generation maize plants; and
- (c) repeating the steps of growing and harvesting successive filial generations to obtain a population of X1179J progeny maize plants.

39. (New)

The population of X1179J progeny maize plants produced by the method of claim 38, said population, on average, deriving at least 50% of its ancestral alleles from X1179J.

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## 40. (New)

A X1179J maize plant selected from the population of X1179J progeny maize plants produced by the method of claim 38, said maize plant deriving at least 50% of its ancestral alleles from X1179J.

## 41. (New)

The method of claim 38, further comprising applying double haploid methods to said  $F_1$  generation maize plant or to a successive filial generation thereof.